

REMARKS/ARGUMENTS

Claims 1-25 remain pending in the application. Applicant, by this paper, amends claim 15. Applicant respectfully requests reconsideration and allowance of all pending claims.

**Discussion of Rejections Under 35 U.S.C. §102**

Claims 1-5 and 7-25 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent Application Publication No. 2005/0113089 to Bamburak et al. (hereinafter Bamburak).

In order for a claim to be anticipated, a single prior art reference must describe, either expressly or inherently, each and every element as set forth in the claim. The Examiner alleges that all of the elements in claims 1-5 and 7-25 are disclosed in Bamburak. Applicant respectfully traverses the rejections and requests reconsideration and allowance of the claims.

Applicant's claims are directed, generally, to methods and apparatus for efficiently selecting and acquiring a wireless communication system. In one embodiment, a mobile station selects a plurality of wireless communication systems from a preferred roaming list. The mobile station attempts to acquire each of the selected wireless communication systems. The mobile station reprioritizes the selected wireless communication systems. *See, generally, Applicant's Specification*, at paragraph [0008].

**Claim 1** recites “[i]n a mobile station storing a list of wireless communications systems, a system acquisition procedure.” The procedure includes “initiating, by the mobile station, acquisition/registration attempts by the mobile station in response to selecting each of the plurality of wireless communication systems.” The Examiner contends that Bamburak describes this claimed feature and cites to Bamburak, paragraphs [0026-0027] and Bamburak, Figs. 6-10.

Bamburak describes a method of locating a preferred wireless service provider in a multi-service provider environment using a frequency band search schedule. *See, Bamburak*, Abstract. The mobile device initially determines if the last service provider used corresponds to an optimal service provider. If so, the mobile device attempts to lock to the control signal corresponding to the last service provider. *See, Bamburak*, at paragraph [0028].

If the last service provider is not an optimal service provider, or if the mobile device is unable to lock to the control signal, the mobile device executes a global spectrum search routine in an attempt to locate and acquire a wireless communication service. *Id.* When executing a global spectrum search, the mobile device searches each possible frequency band in which a service provider may occupy according to a predetermined frequency search schedule. *See, id.*, Abstract. Bamburak states: “A frequency band is examined by dividing the frequency band into many sub-bands, and by locating the strongest signal above a threshold within the sub-band being examined. The examination continues until a second frequency band having a more preferred service provider is located.” *Id.*

Bamburak fails to describe a mobile station selecting each of a plurality of wireless communication systems and “initiating, by the mobile station, acquisition/registration attempts by the mobile station in response to selecting each of the plurality of wireless communication systems,” as claimed in Applicant’s claim 1. Bamburak fails to describe selecting wireless communication systems and then attempting to acquire/register with each selected system. Instead, Bamburak describes searching a frequency band or sub-band for a strongest ACC or a signal having a received signal strength exceeding a minimum threshold. *See, Bamburak*, at paragraph [0029]. The mobile device attempts to lock to the identified signal in each frequency band.

Bamburak describes the mobile device as decoding or extracting the SOC or SID information from the signal meeting the received signal strength threshold. *See, id.* The mobile device compares the decoded or extracted SOC or SID value against a preferred service provider list to determine if the SOC or SID corresponds to an optimal service provider or merely a preferred service provider. *See, id.*

If no optimal service provider is located, the mobile device of Bamburak concludes the global spectrum search by registering with the best service provider. Bamburak states:

The best service provider can be identified by comparing the stored SOC(s) or SID(s) with a list of preferred SOC(s) or SID(s). The list of preferred SOC(s) or SID(s) can include the optimal SOC(s) or SID(s) and a prioritized list of preferred SOC(s) or SID(s) where the higher priority will get preference for registration. The listing also includes undesirable or prohibited SOC(s) or SID(s) that are used only in emergencies (e.g., 911 calls) or if the user enters an override command. *Id.*

The description in Bamburak fails to describe selecting each of a plurality of wireless communication systems and “initiating, by the mobile station, acquisition/registration attempts by the mobile station in response to selecting each of the plurality of wireless communication systems,” as claimed in Applicant’s claim 1. In stark contrast, Bamburak describes searching frequency bands for strong signals, based on received signal strength indications, and attempting to lock to the strong signals.

Bamburak expressly describes the mobile device as having no knowledge of the identify of the service provider prior to locking to the signal. Indeed, Bamburak expressly describes determining the SOC or SID by decoding the received signal or extracting the information from the received signal. Bamburak then describes comparing the extracted SOC or SID to the list of preferred SOC’s or SID’s to determine the desirability of the corresponding service provider. Thus, while Applicant’s claim 1 features selecting a wireless communication system and then attempting to acquire/register to the selected system, Bamburak describes the opposite process of attempting to lock to a strong received signal, and then determining if the service provider associated with the signal is on a list of preferred SOC’s and SID’s.

Bamburak, paragraphs [0026-0027] and Figs. 6-10, cited by the Examiner fail to describe the claimed feature. Bamburak paragraph [0026] describes preferred service provider lists stored in memory of a mobile device, but fails to describe the mobile device selecting a plurality of wireless communication systems for which the mobile device initiates acquisition/registration attempts. Bamburak, paragraph [0027] describes the mobile device locating and registering with a service provider. Again, this paragraph provides no description of selecting a wireless communication system, or of initiating acquisition/registration attempts in response to selecting a wireless communication system. Indeed, Bamburak describes the exact opposite process. Bamburak states: “The communications device examines received service provider code e.g., SOCs (Service Operator Code) or SIDs (System Identification Code) to determine whether the service provider is an optimal, preferred or prohibited service provider.” *Bamburak*, at paragraph [0027]. This step of determining whether the service provider is an optimal, preferred, or prohibited service provider is superfluous if Bamburak describes selecting the wireless communication system.

Bamburak Figs. 6-10 similarly fail to provide any description of the claimed features. Figs. 6-7 fail to illustrate any selecting of a plurality of wireless communication systems for which the mobile device initiates acquisition/registration attempts. Instead, the process flowcharts of Figs. 6-7 describe a frequency search process. Fig. 6 explicitly describes checking an SOC (block 130) following running an RSS Routine (block 124). Fig. 7 is an example of an RSS routine. *See, Bamburak*, paragraph [0021].

Bamburak Figs. 8-9 illustrate a master search schedule of *frequency bands* and fails to describe a list of wireless communication systems. Indeed, Bamburak expressly describes the same frequency band being assigned to multiple SOC and SIDs. *See, Bamburak*, at paragraph [0008].

Bamburak, FIG. 10 illustrates a prioritized list of service providers, but Bamburak fails to describe selecting wireless communication systems and initiating acquisition/registration attempts in response to the selected wireless communication systems. Clearly, Bamburak fails to describe using the prioritized list of service providers as a source for selecting a plurality of wireless communication systems. Instead, as discussed above, Bamburak describes decoding or extracting the SOC and SID information from the received signal and comparing against the prioritized list of preferred SOC or SIDs.

Claim 1 further features “creating and maintaining, by the mobile station, system priority data in response to the mobile station initiating the acquisition/registration attempts, the system priority data including a first plurality of system identifiers and corresponding priority criteria including historical statistical information regarding the acquisition/registration attempts by the mobile station.” Bamburak also fails to describe this claimed feature.

The Examiner contends that Bamburak describes this claimed feature at paragraphs [0026-0027], paragraph [0028] at ll. 10-12, paragraph [0029] at ll. 94-97, and Figs. 6-10. Applicant respectfully disagrees with the interpretation of Bamburak.

Bamburak, paragraphs [0026-0027] fail to describe any priority data that is created or maintained by the mobile station “in response to the mobile station initiating the acquisition/registration attempts.” The only priority data described in Bamburak is the preferred priority list, illustrated in Fig. 10 of Bamburak. However, Bamburak clearly states that the preferred priority list “may be programmed by the manufacturer, by the distributor

when the phone is purchased or by the user. It is also possible to program the table of FIG. 10 over the air using restrictions similar to those used when programming the master search schedule over the air.” *Bamburak*, at paragraph [0039].

Bamburak fails to describe the mobile station creating or maintaining system priority data. Bamburak fails to describe “creating and maintaining, by the mobile station, system priority data in response to the mobile station initiating the acquisition/registration attempts,” in part, because Bamburak fails to describe the feature of initiating the acquisition/registration attempts in response to selecting each of the plurality of wireless communication systems, as discussed above.

Bamburak fails to describe any “historical statistical information regarding the acquisition/registration attempts by the mobile station,” as claimed. At best, Bamburak describes statistical information regarding frequency bands, as shown in Fig. 9. However, the statistical data regarding frequency bands has no relationship to attempting to acquire or register with any particular wireless communication system. Indeed, Bamburak states that the same frequency band may support multiple SOC and SIDs.

Thus, claim 1 is believed to be allowable at least for the reason that Bamburak fails to describe several claimed features. Applicant respectfully requests reconsideration and allowance of claim 1.

**Claim 15** recites a method for creating and maintaining system priority data in a mobile station. The method includes the feature of: “selecting a plurality of wireless communication systems from a list of wireless communications systems” and “retrieving frequency, and mode information for each of the plurality of wireless communications systems.” The method also includes “updating, by the mobile station, an entry in the system priority data to reflect historical statistical information.” Bamburak fails to describe this combination of features.

Bamburak fails to describe “selecting a plurality of wireless communication systems from a list of wireless communications systems” and “retrieving frequency, and mode information for each of the plurality of wireless communications systems,” as claimed. In stark contrast, Bamburak describes searching frequency bands for strong signals, based on received signal strength indications, and attempting to lock to the strong signals.

Bamburak expressly describes the mobile device as having no knowledge of the identify of the service provider prior to locking to the signal. Indeed, Bamburak expressly describes determining the SOC or SID by decoding the received signal or extracting the information from the received signal.

Bamburak describes a frequency search process in which the mobile device does not know the wireless communication system with which it is attempting to lock to. Applicant's claim 15 explicitly features retrieving frequency and mode information for selected wireless communication systems then "detecting, by the mobile station, a communications event for a currently selected wireless communications system in response to an acquisition/registration attempt initiated by the mobile station."

Thus, claim 15, features, generally, selecting a wireless communication system, retrieving mode and frequency information, then detecting a communications event in response to an acquisition/registration attempt. Bamburak describes a system search process that is opposite of what is claimed. In Bamburak, the mobile device searches a frequency band, determines a strong signal, and then attempts to lock to the signal. If the mobile device can lock to the signal, the mobile device determines the SOC or SID from the signal.

Applicant respectfully requests reconsideration and allowance of claim 15, because Bamburak fails to describe the claimed features, and instead, describe a process having steps that are opposite to the claimed features.

**Claim 21** recites a mobile station that includes "a memory, in the mobile station, storing a preferred roaming list, the preferred roaming list including a first plurality of system identifiers and corresponding acquisition parameters." The mobile station also includes processing circuitry. The processing circuitry is adapted to:

“select each of a plurality of wireless communications systems in response to the preferred roaming list;

initiate acquisition/registration attempts by the mobile station in response to selecting each of the plurality of wireless communications systems;

create and maintain system priority data in response to the mobile station initiating the acquisition/registration attempts.”

This combination of structure and features is not described in Bamburak. As discussed above in relation to the rejections of claims 1 and 15, Bamburak fails to describe

selecting a plurality of wireless communications systems in response to the preferred roaming list, and initiating acquisition/registration attempts by the mobile station. As discussed above, Bamburak fails to describe attempting acquisition of wireless systems based on a preferred roaming list. In stark contrast, Bamburak describes searching frequency bands for signals, attempting to lock to the signals, and if lock is successful, extracting the SOC or SID information from the signal. Thus, the mobile device has no knowledge of the system with which it is locked until after it locks and extracts the system information from the channel.

Applicant respectfully requests reconsideration and allowance of claim 21, because Bamburak fails to describe every claimed feature.

**Claims 2-5 and 7-14, 16-20, and 22-25** depend, either directly or indirectly, from one of claims 1, 15, or 21 and are believed to be allowable at least for the reason that they depend from an allowable base claim. Applicant respectfully requests reconsideration and allowance of claims 2-5 and 7-14, 16-20, and 22-25.

#### **Discussion of Rejections Under 35 U.S.C. §103**

Claim 6 was rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Bamburak in view of U.S. Patent No. 5,586,338 to Lynch (hereinafter Lynch).

Claim 6 depends indirectly from claim 1, and is believed to be allowable at least for the reason that claim 6 depends from an allowable base claim. The combination of Lynch with Bamburak fails to teach or suggest the shortcomings of Bamburak alone. In particular, the combination of Lynch with Bamburak fails to teach or suggest those features from claims 1-3 absent from Bamburak. Thus, the combination of Bamburak with Lynch fails to teach or suggest all of the features of the independent claim and intervening claims from which claim 6 depends. Applicant respectfully requests reconsideration and allowance of claim 6.

#### **CONCLUSION**

Applicant believes that all claims pending in the application are allowable. Applicant therefore respectfully requests that a timely Notice of Allowance be issued in this case.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

If there are any other fees due in connection with the filing of the response, please charge the fees to our Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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